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23

| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO.    |
|--|-------------|----------------------|---------------------|---------------------|
| 09/660,186   | 09/12/2000  | Dong Yeung Kwak      | 8733.298.00         | 6720                |
| 30827  | 7590        | 06/02/2005           | EXAMINER            |                     |
| MCKENNA LONG & ALDRIDGE LLP<br>1900 K STREET, NW<br>WASHINGTON, DC 20006 |             |                      |                     | LOKE, STEVEN HO YIN |
|  |             | ART UNIT             |                     | PAPER NUMBER        |
|  |             |                      |                     | 2811                |

DATE MAILED: 06/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| <b>Office Action Summary</b> | Application No.<br>09/660,186 | Applicant(s)<br>KWAK, DONG YEUNG |
|------------------------------|-------------------------------|----------------------------------|
|                              | Examiner<br>Steven Loke       | Art Unit<br>2811                 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 29 October 2004.

2a)  This action is **FINAL**.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 2-6, 9 and 11-20 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) 2, 4 and 6 is/are allowed.

6)  Claim(s) 3, 5, 9, 11-14, 17 and 20 is/are rejected.

7)  Claim(s) 15, 16, 18 and 19 is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All    b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other: \_\_\_\_\_.  
\_\_\_\_\_

1. Claims 3, 5, 9, 11-14, 17 and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3, lines 1-2, claim 17, lines 1-2, the phrase "the channel layer has a width smaller than a width of the signal line and the scanning line" is vague and indefinite. Fig. 2A discloses the channel layer [115] has a width smaller than a width of the signal line [117a] and a width of the scanning line [111]. Therefore, it is recommended that claims 3 and 17 should rewrite as "the channel layer has a width smaller than a width of the signal line and a width the scanning line".

Claim 5, lines 1-2, claim 12, lines 1-2, claim 20, lines 1-2, the phrase "an ohmic contact layer between the source and drain electrodes and the channel layer" is vague and indefinite. Fig. 2B discloses an ohmic contact layer [116] between each of the source electrode [117a] and the drain electrode [117b] and the channel layer [115]. Therefore, it is recommended that claims 5, 12 and 20 should rewrite as "an ohmic contact layer between each of the source electrode and the drain electrode and the channel layer".

Claim 9, line 11, the phrase "a protection film formed on an entire surface" is unclear as to what entire surface is it being referred to. Fig. 2B discloses a protection film (the unshaded area) formed on an entire surface of the substrate [107]. Therefore, it is recommended that claim 9 should rewrite as "a protection film formed on an entire surface of the first substrate".

Claim 9, lines 14-15, the phrase "the drain electrode is parallel to the signal line and is formed to cross the scanning line" is vague and indefinite as to which scanning line is it being referred to. Therefore, it is recommended that claim 9 should rewrite as "the drain electrode is parallel to the signal line and is formed to cross said at least one of the plurality of scanning lines".

Claim 11, lines 1-2, the phrase "the channel layer has a width smaller than a width of the signal line and the scanning line" is vague and indefinite. Fig. 2A discloses the channel layer [115] has a width smaller than a width of the signal line [117a] and a width of the scanning line [111]. Therefore, it is recommended that claim 11 should rewrite as "the channel layer has a width smaller than a width of the signal line and a width of said at least one of the plurality of scanning lines".

Claim 13, lines 1-2, the phrase "the scanning line has a portion enlarged in the vicinity of the signal line" is vague and indefinite as to which scanning line is it being referred to. Therefore, it is recommended that claim 13 should rewrite as "said at least one of the plurality of scanning lines has a portion enlarged in the vicinity of the signal line".

Claim 14, lines 1-3, the phrase "the channel layer is formed along the signal line over the scanning line, and has a width enlarged as much as a width of the scanning line is enlarged" is vague and indefinite as to which scanning line is it being referred to. Therefore, it is recommended that claim 14 should rewrite as "the channel layer is formed along the signal line over said at least one of the plurality of scanning lines, and

has a width enlarged as much as a width of said at least one of the plurality of scanning lines is enlarged".

2. Claims 15, 16, 18 and 19 are objected to because of the following informalities: Claim 15, lines 13-14, the phrase "wherein the drain electrode is parallel to the signal line and formed to cross the scanning line" is not grammatical correct. It is recommended that claim 15 should rewrite as "wherein the drain electrode is parallel to the signal line and is formed to cross the scanning line". Appropriate correction is required.

3. Claims 2, 4 and 6 are allowed.

4. Claim 9 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

5. Claim 15 would be allowable if rewritten or amended to overcome the objection set forth in this Office action.

6. The following is a statement of reasons for the indication of allowable subject matter: The major difference in the claims not found in the prior art of record is the drain electrode is parallel to the signal line and is formed to cross the scanning line.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven Loke whose telephone number is (571) 272-1657. The examiner can normally be reached on 8:20 am to 5:50 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eddie Lee can be reached on (571) 272-1732. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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May 27, 2005

Steven Loka  
Primary Examiner

